

10. The illumination device according to claim 1, wherein the control unit has an imaging error compensation control via which the light source elements of the second light module are switched on the light of which is emitted by the optical unit onto a region imaged only poorly by the optical unit of the first illumination region in order to compensate for imaging errors of the first light module.

11. The illumination device according to claim 1, wherein the control unit has a fine resolution control via which only the light source elements provided for the fine resolution region of the first light module and not of the second light module are activated for the projection of a finely resolved structure in an area in front of the vehicle.

12. The illumination device according to claim 1, wherein the optical unit of the first light module and of the second light module is each formed by a lens arrangement that images the light emitted by the light source of the first light module in the first illumination region and the light emitted by the light source of the second light module in the second illumination region.

13. The illumination device according to claim 1, wherein the control unit is provided exclusively for controlling the light sources of the first light module or of second light module, wherein the light source elements of the light source or light source are controlled such that a low beam distribution or a high beam distribution is generated with or without an integrated fine resolution light distribution.

14. The illumination device according to claim 1, wherein the control unit has a short-term control via which, in a

predefined time window that is dependent on the maximum cooling capacity and on the cooling modules associated with the light sources, the light source elements of the first light module are operated at the maximum light output and the light source elements of the second light module are operated at a differential output to form the required light output at the respective light pixels of the light distribution.

15. The illumination device according to claim 1, wherein the light sources of the first light module and of the second light module each have a plurality of light source elements which, when activated, are operated at the maximum light output or at a partial output and are controlled by the control unit such that a sum of the light output generated by the light source elements of the respective light modules runs within the tolerance band.

16. The illumination device according to claim 1, wherein the maximum thermal light output of the light source corresponds to a sum of the maximum thermal light output of the individual light source elements of the same light source.

17. The illumination device according to claim 1, wherein the light sources of the first and second light module are arranged on the same support.

18. The illumination device according to claim 1, wherein the light sources of the first and second light modules are each assigned a cooling module.

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